

Lorraine Dominique Nakai

Southeastern Utah is home for me. There are many disparate issues affecting people back home in southern Utah. On one hand, I am able to partake of many resources available for budding scientific professional yet on the other hand, I am still a refugee. The Navajos that I descend from resisted the Bosque Redondo Campaign, eluded incarceration and opposed treaty agreements made in their absence. Subsequently, to this day, land use by us (Utah Navajos) is restrictive. However, different energy companies have exercised tremendous flexibility in extracting resources from this area since the 1920s. Nevertheless, in another area, I have grown grapes for nine years and have re-established an orchard in a canyon southwest of Bluff, Utah. The old orchard was destroyed when springs were diverted by dry well demolition operations.

Ironically, my college education was supported in part by funds from oil royalty. I received my undergraduate degree in zoology from Colorado State University in Fort Collins, Colorado and continued graduate study there in parasitology. Originally, I had planned for a career in Medical Entomology, Arbovirology, and Parasitology. As I gained agronomic field experience, I changed my graduate concentration to Entomology. For the past nine years, I have worked as the sole entomologist for a large irrigated farm that is collectively owned by the Navajo Tribe. I instituted the use of a comprehensive pest surveillance plan that help crop managers (farm manager/farmers) reduce chemical application and cost. Finding unconventional ways to solve problems fascinates me and reading physics is my hobby. This past year, I completed a bat and moth survey. I found that bat presence do influence reduction in crop damages, particularly in areas where both the roosting site or flyway was near water source. I am in the process of finishing my master's thesis titled "Water Pan Trapping and Detection of Behavioral and Electrophysiological Responses of Alate Russian Wheat Aphids to Crude Wheat Leaf Volatiles by Olfactometer and Electroantennogram." The bat echolocation and wildlife conservation are the foci of future projects. Since the passing of my parents, I have inherited a portion of our family's farming and ranching responsibility; I am starting my own farm-based science institute with a research laboratory, insectary, greenhouse, herbarium, cold storage, and demonstrations of alternative energy sources. As a single mother of a gifted child, this home-based business (I believe) will allow me greater flexibility in facilitating the education of my son and continuing a rewarding career in agricultural research. Our website is: www.homestead.com/gompa_nakaiinstitute